CLAIMS

1. A cluster computer system comprising:

a plurality of network accessible computers, each including a central
5   processing unit and non-volatile memory, where each of said network accessible
computers is coupled to a network, where said network accessible computers
implement host computer programs which permit the network accessible computers
to operate as host computers for client computers connected to said network,
whereby input devices of said client computers can be used to generate inputs to
10 said host computers, and such that image information generated by said host
computers can be viewed by said client computers; and

a cluster administration computer coupled to said plurality of network
accessible computers to monitor the operation of said network accessible
computers.

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2. A cluster computer system as recited in claim 1 wherein said
plurality of network accessible computers are coupled to said network with a
corresponding plurality of communications channels.

20 3. A cluster computer system as recited in claim 1 wherein said
plurality of network accessible computers also each include volatile memory and
data bus controllers.

4. A cluster computer system as recited in claim 1 wherein said
25 network is a TCP/IP protocol network, and wherein said host computer programs
are responsive to keyboards and pointing devices of said client computers as
transmitted to said host computers over said TCP/IP protocol network under the
control of client programs running on said client computers, said host programs
transmitting said image information to said client computers over said TCP/IP
30 protocol network for display in browser windows of browser programs running on
said client computers.

5.   A cluster computer system as recited in claim 4 wherein said client programs are transmitted to said client computers over said TCP/IP protocol network.

6.   A cluster computer system as recited in claim 5 wherein said client programs are Java Applet programs.

7.   A cluster computer system as recited in claim 4 wherein said cluster administration computer is operative to control at least one function of said network accessible computers.

8.   A cluster computer system as recited in claim 7 wherein said at least one function is to reset a selected network accessible computer.

9.   A cluster computer system as recited in claim 4 wherein said cluster administration computer is coupled to said network to receive inputs from other computer systems coupled to said network.

10.   A cluster computer system as recited in claim 4 wherein said cluster administration computer serves to coordinate the sharing of at least one local resource by said network accessible computers.

11.   A cluster computer system as recited in claim 10 wherein said at least one local resource is a data storage device.

12.   A cluster computer as recited in claim 4 wherein said cluster administration computer is running a cluster administration program which administers the connection of a client computer to a host computer.

13.   A method for providing access to host computers by client computers over a computer network comprising:

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receiving a request for a host computer coupled to a computer network from a client computer coupled to said computer network, wherein the relationship of said host computer to said client computer is to be such that after said client computer becomes associated with a host computer, an input device of said client computer can be used to generate inputs to said host computer, and such that image information generated by said host computer can be viewed by said client computer;

determining a suitable host computer for said client computer; and

informing said client computer of the network address of said suitable host computer, whereby said client computer can become associated with said host computer.

14.   A method for providing access to host computers by client computers over a computer network as recited in claim 13 wherein determining a suitable host computer includes receiving the desired requirements for a host computer from said client computer, and comparing said desired requirements to the characteristics of available host computers on said computer network.

15.   A method for providing access to host computers by client computers over a computer network as recited in claim 14 further comprising loading a personal state of a client using said client computer into said network accessible computer that will serve as said suitable host computer.

16.   A method for providing access to host computers by client computer over a computer network as recited in claim 15 further comprising monitoring the functionality of a plurality of network accessible computers, and resetting a network accessible computer if it is determined that it is not functioning properly.

17.   A computer readable media having program instructions implementing the method of claim 16.

18.   A computer readable media having program instructions implementing the method of claim 13.

19.   A wide area TCP/IP protocol network comprising:

at least one ground station capable of transmitting and receiving TCP/IP compatible data packets, said at least one ground station being coupled to a TCP/IP protocol network to exchange TCP/IP data packets with said network;

a plurality of non geo-synchronous earth-orbiting bodies capable of transmitting and receiving TCP/IP compatible data packets, where at least one of said earth-orbiting bodies can communicate with said at least one ground station at any given point in time.

20.   A wide area TCP/IP protocol network as recited in claim 19 wherein:

said plurality earth orbiting bodies include a plurality of low-earth orbit satellites that communicate with TCP/IP compatible data packets, said satellites communicating both with said ground station and with at least one other satellite, said satellites handing off communication with said ground station to a satellite that is in a best position to communicate with said ground station.